



## **Multi-State Study of Pre-Kindergarten**

The Office of Educational Research and Improvement in the U.S. Department of Education has funded the National Center for Early Development and Learning to conduct a multi-state study of U.S. pre-kindergarten (pre-k) programs. For this study, "pre-k" includes **center-based programs for 4-year olds that are fully or partially funded by state education agencies and that are operated in schools or under the direction of state and local education agencies.** Several surveys of state pre-k programs have been conducted, but this effort is the first multi-state study to include extensive classroom observations, child assessments, and kindergarten follow-up. This study will generate completely new data about the nation's pre-k programs.

The study is taking place in six states selected from among states that have committed significant resources to pre-k initiatives. States were selected to maximize diversity with regard to geography, program settings (public school or community setting), program intensity (full-day vs. part-day), and educational requirements for teachers. Within each state, a random sample of 40 centers/schools was selected. One classroom in each center/school was selected at random for observation, and four children in each classroom were selected for individual assessment. Data collection began in the fall of 2001 and will end in the spring of 2003, following children from the beginning of pre-k through the end of kindergarten.

In five of the six states we also visited families in their homes. The aim of this family component was to gather information from parents and children that can be used to describe variations in home learning environments, relationships, and practices and assess their impact on academic motivation, reading, numeracy, and socio-emotional competence. Parents provided information about their views of the programs, their relationships with schools and teachers, and their children's development. Additionally, parents and children were videotaped while playing games together. Supplemental funding for the family visits was provided by the Foundation for Child Development.

In the spring of 2003 we are studying financing and cost issues of the pre-kindergarten programs in the study in collaboration with the National Institute for Early Education Research (NIEER) at Rutgers University and with the National Prekindergarten Center (NPC) at the FPG Child Development Institute at UNC-CH. Financial data to be gathered include both revenues and expenses or costs. Federal, state, local, private and miscellaneous revenue data will be collected. Cost data to be collected include labor costs (e.g., salaries, benefits, contracted services), facility costs (e.g., rent, utilities, repair and maintenance, insurance), and program costs (e.g., supplies and materials, food service, equipment, staff training and education). Other related information we will collect includes in-kind contributions, and program enrollment and staffing. The data are being collected through an on-site interview with program directors or principals, and

with other agency or district level staff as needed. We are collecting financial information for the 2001-2002 school year to allow us to have accurate cost and revenue data on the pre-kindergarten programs for the same year we have the full set of data on programs and children.

A collaborative team of researchers (listed below) from the University of North Carolina at Chapel Hill, the University of California at Los Angeles, and the University of Virginia are conducting this study. Key pre-k administrators from each participating state and national early childhood experts work with the researchers to evaluate progress, discuss preliminary results, and strategize about next steps. Within each state, a team of well-trained data collectors is conducting the observations and assessments. More details about the study are provided below.

### **Educational significance**

This information about how public schools are supporting young children's learning and development will provide the early childhood community with new knowledge in several key areas:

- pre-k teacher education and training;
- practices teachers use in the classroom and how they relate to the acquisition of language, literacy, and mathematics competencies, as well as social-emotional development;
- community partnerships for funding early learning programs;
- effective strategies for disseminating early childhood education information to teachers, policy-makers, and parents; and
- impact of pre-k programs on early education and development.

This research will provide guidance for state and local public policy-making and for day-to-day practices in schools, centers, and classrooms. While the data collected will not provide a precise description of child outcomes and classroom quality at the level of each state, it will give participating states a broad picture of their current pre-k and kindergarten programs.

### **State selection**

Based on data obtained from NCEDL's Survey of State Early Childhood Specialists, state-level pre-k administrators from 10 states with large pre-kindergarten initiatives attended a meeting in Chapel Hill, NC in late November 2000. The purpose of the meeting was for researchers and state pre-k administrators to discuss details of the study design and implementation and to share additional information about pre-k programs. Following this meeting, six states were invited to participate in the study. The state selection was based on geographic diversity, program settings, intensity, and educational requirements for teachers, creating a targeted (rather than nationally representative) sample. In each state, we are working with key early childhood personnel to implement the study and interpret and disseminate the results.

### **Information being collected about the general quality of classroom services and specific instructional practices**

Detailed information is being gathered about what is actually happening in the pre-k and kindergarten classrooms. We are learning what early childhood teachers think about child development and how they actually teach, including instructional practices around language, literacy, mathematics concepts, and social-emotional competencies. Additionally, we are learning about practices teachers and schools use to help young children make the transition from pre-k to kindergarten. Research on transition issues was an integral part of NCEDL's work during its first five years and continues to be a primary focus.

Within the 40 classrooms in each participating state, carefully trained data collectors are conducting classroom observations twice each year. Additionally, surveys are being used with administrators/principals, teachers, and parents. These data should provide early childhood teachers and administrators, policy-makers, families, and teacher educators with new knowledge as to how teachers' professional development/training experiences match actual classroom practices and provide a thorough description of pre-k and kindergarten classroom environments.

### **Information being gathered about children**

Within each participating pre-k classroom, 4 randomly selected children are being assessed using an appropriate battery of individual instruments to measure language, literacy, mathematics, and related concept development, as well as social competence. A panel of expert reviewers aided the researchers in selecting a variety of standardized and non-standardized assessments.

The pre-k child assessments were conducted in the fall and spring of 2001-02. The same children are being followed into kindergarten and assessed in the fall and spring of 2002-03. These data will help us understand whether the specific practices employed by pre-k teachers make a difference in the transition to kindergarten. We will have information about how pre-k programs help prepare young children to be successful in kindergarten. This approach will allow us to have a much clearer understanding of the relationship between specific instructional practices in pre-k and kindergarten classes and the various components of child outcomes under investigation.

### **Information being gathered about families**

In individual home-based interviews, information on socio-economic, socio-cultural, and familial contexts were obtained through open-ended questions, structured ratings, and videotaped parent-child interactions. Specifically, parents were asked about: (a) family life as it relates to socio-economic status and socio-cultural environment; (b) family educational practices and beliefs about the comparative roles of school and family in educating children; (c) the nature and quality of the home-school relationship; and [d] their own ratings of their children's psychological development and social competence.

## **Dissemination**

A strong dissemination effort is planned, commensurate with the importance of the NCEDL's Multi-State Study of Pre-Kindergarten. In addition, after we have collected the pre-k data, we will invite the pre-k teachers and aides who participated in the study to share their ideas about disseminating the information to those who need it to effect change. We will use the website developed during NCEDL's initial funding period, press releases and press conferences, as well as a variety of print resources. Our key work will continue to be published through quality peer-reviewed journals. NCEDL will continue its close collaboration with the early childhood specialists in state departments of education. We will seek guidance from them on key decisions as well as provide them with early access to findings through an annual conference and regular contact through print and web-based materials.

## **Research team**

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NCEDL Multi-State Study of Pre-Kindergarten  
Sampling Plan

